DEPARTMENT OF ECONOMICS
COLORADO STATE UNIVERSITY

AREC 741 and ECON 741: Advanced Environmental Economics

Spring 2018, TR 12:30 PM – 13:45 PM, 118 Eddy

Professor Edward B. Barbier

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Office Hours
TR 10:00 AM – 11:30 AM, or by appointment

Course Website (2018SP-AREC-741-001)

Available at http://canvas.colostate.edu
Make sure that your email is set to receive announcements from this system. In the uncommon circumstances that I have to cancel regular class of office hours, I will announce this through the course website. University weather closures are announced via the University alert system.

Course Description: This course explores recent theoretical and empirical advances in natural resource and environmental economics. The lectures and seminars will be organized around the following key topics: land use and soil erosion, forestry for timber and non-timber benefits, valuing non-market ecological functions, trade and resource use, resource management under uncertainty, and sustainable development.

Prerequisites
It is presumed that students taking the course have completed graduate-level micro and macro course sequence in economics, or equivalent.

Learning Objectives
The main aim of this course is to encourage graduate students to become familiar with recent advances in theoretical and empirical analyses of environmental and resource economics through learning to read, critically evaluate, and hopefully begin developing, analytical contributions to these areas. The first part of the course will involve the instructor introducing the students to the topics through selecting key articles and readings to critically evaluate. This will take place through both lectures and group discussion. The final part of the course will involve student-led seminars based on the course topics. Each seminar will consist of both a paper presentation as well as a group discussion of the material presented.

Grading and Course Requirements
The academic requirements of this course consist of a final examination at the end of the semester and two seminar papers and presentations. The exam will count for 40% of your
Final grade, and each seminar paper and presentation will count for 30% (20% for the paper and 10% for the presentation). All grading will be done on a standard point system and not curved.

The final examination will be based on the required reading indicated under each topic, and in particular the material introduced in class during the first part of the course.

For the first seminar presentation and paper, each student will have to choose a published paper relevant to any one of the course topics, explain the methodology and results, critically evaluate the modelling approach of the paper, and finally, suggest briefly a possible extension or reformulation of the model. For the second seminar presentation and paper, the student will attempt to develop further the suggested extension or reformulation of the model into his or own paper on the selected topic, and explain the possible contribution of this approach to the literature.

The distribution of seminar topics among students will be agreed by February 1. Although not all topics need to be covered, a broad spectrum of seminar topics will be the aim.

On the day of the student’s first seminar the student should hand out to the class a version of the first paper. However, the deadline for all students to submit a final version of the first seminar paper is April 5. The student should also be prepared to hand out a version of their second paper on the day of that seminar. However, the deadline for all students to submit a final version of the second seminar paper is May 1.

The final examination is scheduled to be held on Wednesday May 9 from 9:40 AM to 11:40 AM (See http://registrar.colostate.edu/academic-resourcesfinal-exams/).

Contact Hours and Expectations for Work Outside of Instructional Time
To be successful, each week students are expected to spend approximately three hours in lecture, and at least six hours engaging in activities including reading the texts and journal references, reviewing class notes, and researching and preparing the two seminar assignments. Preparation for the final exam will involve additional review and studying of course material at the end of the semester.

Policy on Course Attendance
You are expected to be present in class and are responsible for the material covered whether or not it is also posted online. If you miss class, it is your responsibility to inform me in advance, or in case of an emergency, as soon as possible afterwards. You are also expected to find out from your classmates what you have missed and obtain relevant notes and any in-class materials from them. As per University policy, students are exempted from attending class for University sanctioned activities with appropriate official documentation. In general, with evidence of sanctioned activity, you may be able to arrange to turn in materials early.

Other Course Policies
Disruptive behavior is not tolerated and is grounds for being asked to leave. This includes the use of cell phones, reading newspapers, and accessing any other unrelated material in class.
Offensive or threatening treatment of an individual is especially not tolerated. Disruptive students will be referred to University officials. In general, I will that expect that you be respectful of me and your classmates, and that you will take the course seriously.

Departmental Statement on Copyright
Please do not share material from this course in online, print or other media. Course material is the property of the instructor who developed the course. Materials authored by third parties and used in this course are also subject to copyright protection. Posting course materials on external online sites (commercial or not) violates both copyright law and the CSU Student Contact Code. Students who share course content without the instructor’s express permission, including with online sites that post materials so sell to other students, could face disciplinary or legal action. This includes seminar papers and presentation, or any final exam questions and answers.

Academic Integrity
This course will adhere to the CSU Academic Integrity Policy as found on the Student Responsibilities page of the CSU General Catalog and in the Student Conduct Code. At a minimum, violations will result in a grading penalty in this course and a report to the Office of Conflict Resolution and Student Conduct Services.

As per University policy, “Any student found responsible for having engaged in academic misconduct will be subject to academic penalty and/or University disciplinary action” (General Catalog, http://catalog.colostate.edu/general-catalog/policies/students-responsibilities/). As such, any academic dishonesty in this course may result in a grade of “F” for the course and may be reported to the Office of Conflict Resolution and Student Conduct Services. Please be aware that the General Catalog specifically identifies the following examples of academic dishonesty: cheating, plagiarism, unauthorized possession or disposition of academic materials, falsification, and facilitation of cases of academic dishonesty. Plagiarism is defined as follows: “Plagiarism includes the copying of language, structure, images, ideas, or thoughts of another, and representing them as one’s own without proper acknowledgement and is related only to work submitted for credit; the failure to cite sources properly; sources must always be appropriately referenced, whether the source is printed, electronic or spoken. Examples include a submission of purchased research papers or homework as one’s own work; paraphrasing and/or quoting material without properly documenting the source” (General Catalog, http://catalog.colostate.edu/general-catalog/policies/students-responsibilities/).

Accommodations
Students requesting special accommodations should contact Resources for Disabled Students (RDS) at 970-491-6385. Accommodations for exams will not be granted without pre-approval from RDS. If this applies to you, please make arrangements immediately.

Title IX
CSU’s Discrimination, Harassment, Sexual Harassment, Sexual Misconduct, Domestic Violence, Dating Violence, Stalking, and Retaliation Policy designates faculty and employees of the University as “Responsible Employees”. This designation is consistent with federal law and guidance, and requires faculty to report information regarding students who may have experienced any form of sexual harassment, sexual misconduct, relationship violence, stalking or
retaliation. This includes information shared with faculty in person, electronic communications or in class assignments. A “Responsible Employees”, faculty may refer students to campus resources (see below), together with informing the Office of Support and Safety Assessment to help ensure student safety and welfare. Information regarding sexual harassment, sexual misconduct, relationship violence, stalking or retaliation is treated with greatest degree of confidentiality possible while also ensuring student and campus safety.

Any student who may be the victim of sexual harassment, sexual misconduct, relationship violence, stalking or retaliation is encouraged to report to CSU through one or more of the following resources: Emergency Response 911, Deputy Title IX Coordinator/Office of Support and Safety Assessment 970-491-1350, CSU Police Department (non-emergency) 970-491-6425. For counseling support and assistance, please see the CSU Health Network, which includes a variety of counseling services that can be accessed at http://www.health.colostate.edu/. The Sexual Assault Victim Assistance Team is a confidential student resource that does not have a reporting requirement: http://www.wgac.colostate.edu/need-help-support/.

Course Readings
The course is organized around a set of key topics in environmental and resource economics. There is no required text for this course. Instead, each topic will contain a number of core readings selected from key journal articles and book chapters, which students are expected to read.

Although there is no required text for the course, the following three texts are recommended:


Students should obtain copies of these texts, especially if they plan to pursue further graduate studies in environmental and natural resource economics.
Course Outline

The following topics form the basis of the course. Under each topic is a list of core readings that each student is required to read. The lectures and group discussions in the first part of this course will be drawn from these readings. Students should have read these course readings in advance and be prepared to discuss them in class.

The suggested readings under each topic indicate the type of papers that each student might select for the first seminar paper and presentation. The student does not have to choose one of these papers, but is encouraged to pick a paper that is related to this literature. Any paper chosen for a student’s seminar that is not on this list needs to be approved in advance by the instructor.

0. Natural Resource Applications of Dynamic Optimization

Core readings:


1. Land and Water

Core Readings:


Suggested Readings:


II Forestry for Timber and Non-Timber Benefits

Core Readings:


Suggested Readings:


### III Ecosystems as Natural Assets

**Core Readings:**


**Suggested Readings:**


IV Trade and Resource Use

Core Readings:


Suggested Readings:


V Resource Management under Uncertainty

Core Readings:


Suggested Readings:


VI Sustainable Development

**Core Readings:**


**Suggested Readings:**


